Pocket Notebook
PN 25-00-00 (1925-1926)

This notebook dates from June 1925 - April 1926. The pocket notebook contains notes by Thomas A. Edison relating to experiments with rubber, limestone, Ford starter cells, chemicals, phonograph records, resin and record labels. There are also notes about urine tests. Filed separately are thirteen loose pages containing notes relating to experiments with chemicals, rubber, asphalt and mold blanks. The notebook was originally found in Thomas A. Edison's desk at Glenmont.

1925
✡3346

EDIS 223918

Curvys Territory
June 10

Sales Phonos + records

1923 } average per dealer
532 883 } 2327

1924 }
459 879 } 2126 -

Boyds City Dispatch has
following lists

16938 Musical Insts, Musical
Merchandise Dealers & Repairers
in US Price $ 75
also standing as to Capital

They are divided into States

1815	Violin teachers	$ 15
1883	Bands	4
3978	Theatres	25
16606	Moving Pic house	50
364	Schools Military	5
323	Phono Mfrs	5
602	Piano & Organ Mfrs	5
563	Music Composers	5
484	" Publishers	5

15742 Cycles - Dry
mix Drum June 12/25

Best - Reg paper
40 stands over vault
net total 49 stands

~~Write Disc dealers who gave up Amberola + get list of owners we pay them 5% for 3 years. on all sales + circularize them~~

~~To catch sample system dealer Who delay + spoil record Our Man goes to jobbers place takes 1/2 as many boxes as Club~~

Divide a Club in 2 parts + get 2 returns instead of one as now_

This will spot 2 persons in a club of 4 — do this 2 or 3 times But first note which clubs spoil or delay or both + only operate on the bad ones

Now you have it down to 2 in a 4 member club of a 6 member

club you have it down to
3 of 2. you can split
into into 3 boxes
– Catch the man –
when reported write proper
letter and say without
they carry out instruction
you will be compelled to
Cut them off of club service

You should alway have a
system to note progress
of boxes by noting
time of arrival of
orders and reception
of boxes, here you
have a method of
finding out who
delays

If you establish a system
with proper recording sheets
– thoroughly teach your every
man there will be no
trouble, assume this man
is absolutely void of
imagination & then teach
him for this understanding

Exprmts to get Canvasser
Try Situation wanted Salesmen
for Valley in newspaper
Try farmers son who play
Some Musical Inst who
likes Music, strong talk
for Country planting

1= Find out about Edison Appliance people-

2= Utley - Teachers put in phono in Schools next season give teacher Common 5% or principal of School- if OK + gets principal. Dealer pays rent

3 Noon hour in factories 5% Com

4 Excursion boats, Comm to Stewards

5 Summer hotels middle class where no musicians

6 Church fairs, Boy Scouts head qrs Commn,

7 YMCA K of Columbus

8 Country Clubs - Commn

9 Beauty parlors Dressmakers waiting Rms parlors - Bootblack parlors

Rubber in A4	oz
Mushroom Valve	.05
1 Grid Separator Positive	1.088
1 " Neg	1.088
Side sheets 2	1.408
Side rod Insulator 2	.192
Pin insulator 56	1.96
Pole washer 2	.080
Pole insulators	.056
Gland Cup red-P	.101
" " Black N	.101
Soft rubber gaskets	.160
	6.284 ounces

2½ cells to lb.

.580

4 buttons hold cells in tray

total [illegible]

# of part	name of part	Part Number	weight 1000 pieces	Weight cell in oz
1	Mushroom Valve	814 H	3 lb 2 oz	.050
1	P Grid seperator	558 1-P	68 lbs	1.088
1	N " "	558 1N	68 lbs	1.088
2	Side sheet insulators	060-1	44 lbs	1.408
2	" rod insulator	573-H	6 lbs	.192
56	Pin insulators	057-1	2 lb 3 oz	1.96
2	Pole washer	007	2.5 lbs	.080
2	" insulators	008	1.75 lbs	.056
1	Gland Cap black	011	6 lbs	.101
1	" " Red	080	6 lb 5 oz	.101
2	Stuffing box gaskets	009	3 lbs	.160
			ounces	6.284
4	Tray buttons	220-	9 lb 1 oz	.580
	Total Cost 1 A4	.7612		
	Cost per lb	1.98		

Mushroom Valve	$ 8.21 lb
P grid seperator	2.33 "
N " "	2.33
Sheet side insulator	1.35
Rod	5.66
Pin - sheet uncut	.89
Pole	7.44
Pole Washer	4.80
Gland Cap N	4.57
" P red	5.99

Burns give Reefe
New 300 Catalog

June 16/25

1.9 total Royalty if sold 1 of each

300 list

Number faces 584. 16 are single

" " " subject Publisher Royalty

157 – Royalty 2.80

129 sub to artist Only 8¢

pay as 2 in some cases on one record

Amount Royalty on 129 faces $12.97

Number faces not subject to Royalty 316 –

Average royalty on 1.00 Records .0166

Average on 1.50 .011

Average " 2.00 .1314

Practically 158 complete Records no royalty

142 royalty total 4 cents

principally artist royalty, but few sold ~~of~~ comparatively

~~Stain limestone with a colored acid one of which makes a greater color with Mg than lime –~~

Dissolve limestone & throw down lime by Ammon Oxalate not Mg a little Magnesia carried down

Can dissolve this in HCl & precip by NH_4 & Ammon Oxalate – Try it –

Walsh Has following old tunes Lucy Long,

Jim along Josie

Nicodemus Johnson

Dolly Come up

Moore Theo says it takes 35 seconds for platters to come down in Blank + Printing press. I thought it was much quicker! if we make a bigger Opening Cant we Cut time in two saving 17 seconds on each round + thus save Labor expd- increasing output

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Meadowcrofts son got
Vilkins & his Dinah
Banks of the Wabash
The letter that never came
The good old summer time

Moving Picture

Fox News

Mr Edison making his morning rounds to his experimental ~~labratories~~

~~Scenario~~

~~Mr Edison goes out of front door into Galvanometer Room~~

~~Leaves Galvanometer Room and goes over to building #11.~~

~~Meadowcroft will come into building #11 and leave with T.A.E. pointing across the yard asking him to witness a test of throwing mail bags + containing records.~~

~~Witnesses the Test and then walks down to Chemical Room. Perhaps some of~~

~~our people may stop~~
~~I.A.E. on the way, to~~
~~ask questions.~~

~~I.A.E. stays in Chemical~~
~~Room one minute & then~~
~~comes out and goes up~~
~~steps into machine shop.~~

~~Finis~~

---

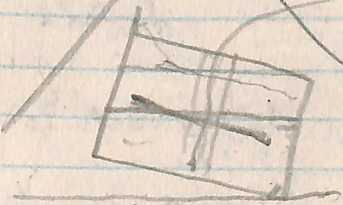
ask Payne if he used
Gelatin on the single
Asbestos Fe & single
Ni Cells -

June 24/25

Stevenson marked
6 Reports from Cleveland
Jobber, as from Orange
no Excuse for this
Mark this as any
Error #1

June 25/24

~~Payne by placing Cells at~~
~~slight angle & filling slowly~~
~~Electrolyte will enter & wet~~
~~whole asbestos before general~~
~~level reaches upturned Edge~~



~~If 3" high & takes~~
~~24 minutes it raised~~
~~1/8" above horizontal~~
~~gives 1 minute to run~~
~~in that would be plenty~~
~~possibly fill in 10 minutes~~

Payne Can't you make
3 sheets gelatin & 3 for
iron & while 3 are wet
press together & dry &
Calender & test for
tight

another idea Osmosis —
Make Each sheet of the Fe
spots thinner than rest say
2/3 thinner stages then when
2nd sheet laid on the 1/3 will
match a full thickness —
+ so on this would give porous
receptacles to hold solution
+ prevent P pole drying out
by Osmosis —

Even of the 4 sheets
every alternate sheet
Could have 1/16 holes
punched in + staggered
or not

Perhaps lot of 30/1000s
holes in Ni sheet
would be good

I think Ferrous Fe Anhyd sulphate
Solution boiling if dropped
into 35 or 40 % NaOH
at very highest temperature
will make Anhydrous
Try Ferrous Oxide + be OK for Battery

As Ford Starter Cell loses
on a small amount of water
when over charge compared
to what should lose
theoretically seems no doubt
but there is some catalysis
going on, ~~There~~ + to regenerate
the gases back to water

Put 3 Columns Canvassing
Straight dealer - prospect
chaser - Subdealer, +
Number of machines

Shorthill - Burch May NG
Cant be taught - probably dont read reprints

July 3/25 Neys man

~~Gowdey - old~~
~~Gowdy young~~
~~Tilsworth~~
~~Clymo~~
~~Kennedy~~
~~Stanley~~

~~Fallon~~
~~McCauley~~
~~Reed~~
~~Porter~~
~~White~~

Chg 10 cents pkg New postage rate 1½ Times increase.

	Cost Zone	1	2	3
2 lbs	one record	9	9	12
	Pkg charge	10	10	10
		19	19	22
average $1.14 (sold)	Cost Record	69	69	69
		88	88	91
	Profit	26	26	23

Two Records 3 lbs	1	2	3
	20.5	20.5	25
½ vs	10.25	10.25	12.5
69 Cost	6900	6900	69.0
	79.25	79.25	81.5
Profit	34¾	34¾	32½

12" Record new rate

3 lb	Zone 1	2	3
	10.5	10.5	15
pkg	100	10.0	10
	20.5	20.5	25
Chg for record	75	75	75
	95.5	95.5	100

Chg 1^{00} all around

Group of Burns dealers having 5 to 10 Machines had average purchases in 1924 of $55 for year 4.6 records month. if use 12" sample at Cost to dealer of $12. yearly Dealers being in 1 2 & 3rd Zone, increased postage Yearly profits $\$11^{\underline{70}}$

Another Group from 10 to 19 Machines purchasing $69 yearly or 100 Records or 5¾ records month under same Conditions Make a profit of $\$18^{\underline{00}}$ yearly

Group from 20 to 56 Machines $165 yearly or 240 Records Make a profit of $\$60^{00}$ yearly

~~Werner~~
~~Make test record~~
~~of your 2 best~~
~~& Hayes with~~
~~his do same~~

I believe I have partially solved
the problem why LiOH is good
for Alkali Storage Battery
Say in A4. We must use
Enough soluble LiOH & some
in powder form as 90 grams
will not dissolve,
I find it - Causticizes the K_2CO_3
& precipitates as Li_2CO
As Cell gets older & gets
more Carbonated the LiOH
Automatically Causticizes it
In Ford starter type Li_2CO_3
may deposit in the
asbestos & be bad

Chicago needs 17 Racks
to hold 8801 300 list
& 4892 on 680 list.
Total 13693

Kansas needs 9 Racks
to hold 4001 of 300 list
and 2482 of 680 list
Total 6483 Records

Schmerka find out if
Hypochlorite really
dissolves flour of sulphur
& If dont see if NaOH
alone or something else
Bi S Carb will I think
penetrate & dissolve also
force sulphur out

Benny It costs 9 cents
an hour to keep a press in
for interest + depreciation
Idle
It costs 50 cents an hour
to keep a man idle.
So you see every effort
should be made to keep
the man busy never
mind the cost of idle
press.

Always sell your best
goods using comparison
You can always sell
a higher priced good
instrument & make
more profit.

You cannot make a
profit planting inferior
phonos when business is
bad or even fair. Planting
phonos creates a desire
with poor ones you have
to plant so many to get
one sales makes it
unprofitable ~~[illegible]~~
with good phonos the
desire is strong and 1
sale is made for far
less number of plantings
+ this gives a profit
as truck has to handle
less + salary + truck
expenses and less per
sale

Disposition of new men
4 or 5 days with Whalen —
4 " Reading Traveller reports
Then sent to travellers to
finish Education stay two
or 3 weeks Then return to
Orange to be taught
Servicing & selling —

1 goes to Stoffel
1 " Zensler
1 " for Disc Inspector
1 " assist Burns
1 " " Anderson
Etc — But not yet
decided on these —

Want a woman for
Orange servicing
soon as possible —

Run a wear test on
Aniline Violet Coated
Disc with that big
hole — use stronger
aniline until it slows
up It may be
we should try an Amberola
diamond in reg Disc
& see if sides have
anything to do with
the bad timbre

There may be something in
drying 24 hours all varnished
blanks before baking —

July 11 1925 On hand

Sheratons	3544
Wm & Mary	1690
Jacobean	916
H&P	710
Total.	6860

July 11/25

Rayon defect is high absorption of Water = I wonder if very thin solution Condensite with plenty Paraphenylendiamine in Rayon being soaked in sol then Excess removed by Centifuge & then heated 150° fhr to condense to final stage think Rayon would be Waterproof Try it

~~Find out how many black Label Records Girard has got.~~

Take up matter of getting flat blanks those that get dished after making & see how high Viscosity Can work

Girard Jobbers Vict Edison

Sales Retail

Victor & other make	1920	$ 331,000
	1921	" 270,000
	1922	455 000
	1923	281,000
	1924	149 000
Edison	1920	63,200
	1921	36 000
	1922	44 000
	1923	32 000
	1924	16 000

Radio retail sales
1924 49,000
Feby 1925 to June inclusive
89,000.

Wholesale sales from Feby
1925 to June 1925
90 000 Compared to
40,000 phono sales

Girard Inventory June 1:
1925 $18317 for Machines

White Label $2880,0

Black " 139000 Records
Amberol 30000 "
Where is White Label stock

Dem Expmt Servicing

107 owners serviced

Average	Black	pr owner	21.4
"	White	"	14.38
"	Both		36-

1392 Black 948 White
of 107 speed

of 6 Best selling rec'ds
sold to 107 owners
W. NY – 4 were late
songs 2 " Jazz

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107 Own

48 Machines	80 Speed
1	98
3	94
6	92
11	90
9	88
12	82
42	80

107 owners
17 Had Radio
28 " Piano
27 " Piano & Radio
Phonograph Prospects about 15
Piano prospects 3
Reproducers Changed 3

80 1^{00} Records sold
29 1^{50} "
81 2^{00} "
average 1.19^{2}

Best Sellers 4 Songs
" 2 Jazz

Sold	9 –	51500	How do you do
"	5	51560	West of the Great Divide
"	4	51543	Swanee Butterfly Fox T
	6	51506	All Alone
	4	5551	Flapper Wife jazz
	5	80829	June brot the Roses
	4	80160	Kathleen Home ag

When Ferris comes with his Dealer, Jobber & Edison inventories, consider of Exchange London, Console, Baby & the others for new ones using same machines by transferring to new after fixing up. then changing legs & fix up like new ones

July 24/25
Sales Bellino Waltz 80801
released July 18/24 4243

80806 Moonlight Sonata
released Oct 10/24 3.179

Scheme Closes to
meet 1/2 price Victor
argument Carry Victor
Comparison records —
a needle reproducer
then where they come
up give them a demonstrator

Get that Copy of Dom
terms of sale back from
Bolan + file + also
Record it in this book

Go over disc plant + find
where woman can be used
think some can be used in
Clancy dept, Have asked
Moore about redesigning
a long table + using 1 man
+ 4 women for Buffing
Assembly

Why 19 men in Amberola
get list + consolidate
some — also cycles
taken in Halls dept,

See if Can make Machine
Screw + unscrew all screws
of a mould ring at
once,

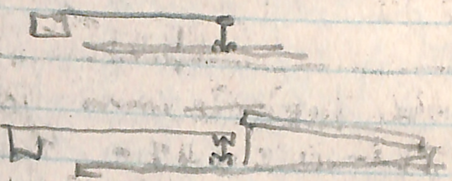
Has Rwitgs gone

Keep at Teed to reduce
force —

How about lay off in Store room
Disc —

Walk thru Phono works
Eye to reducing force

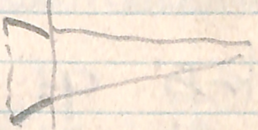
Werner attach Spring to
Diaphm not rigid but
by a



Condensite Diaphms must
be got absolutely flat all
around Edges and the
Rubber ring must be
perfectly flat so no leak

Try funnel echo End open
in Recdg room, also plugged
with Cowhair — see if reduces
it —

Plan a 4 feet flair to
funnel



~~Put Sweede Arhennius man
on finding role lithia plays
in S.B.~~

1925

Monthly Teed Reports January 25
32.73 — 10.62 = 42 —
402876 Prints 339000 Stock

Feby 36.89 — 10.25 — 47 cents
318000 Prints 284670 Stock

March 50.58 — 14.50 — 65 cents
291000 Prints 261000 Stock

April — 39.95 — 17.89 57.84
208632 — 193798 to stock

May — 62.23 — 20.42 82.65 cents
128964 — 107302 Stock

June 47.61 — 20.00 67.66 cts
138264 Prints 119841 Stock

Weight Complete Cell without Records

HEP	91
Sherton	95
Loud Uprite	77

Out July 27 - about 6000 daily -

If 1000 more was made

Extra Cost for Labor.	55.75
Materials	69 07
Steam, Water, Electricity	48 80
	173.62
Pkg & Boxing	8 45
	182 07

or 18.1 Cents Each

July 27/25

Percent ok final inspection of reclaimed Cell parts inspected at Orange

Can	78 % OK
Can Cover	81 "
Valve Spring	98
Valve Cover	98
P pole group	44
N " "	46
Iron Grid	99
3 Space washers	99
Connecting rod nut	100
Split Washer	66
Gland ring	100
Connectors	100

Rubber Parts

Pos grid separator	97
Neg "	97
Side sheet Insulator	74
Side rod	93
Pin insulators	100

new 20 group CM plan

Large Ford Closed body truck
Cost $650.
Depreciation over period of 5 years
when dead - $2 50 week
Repairs weekly 1 50
Interest 6% 5 years 75 cents week
Salesman $30 weekly
Helper $25 "
Rent 6 demonstrators 75 cents
per week each $4 50 week
Trucks makes 30 miles daily
2½ gals gasoline at 25 cents
gallon 62 cents daily $3 75 week
Tires + inner tubes $2.75 "
Oil 50 cents week
Insurance 25 cents week
20 Sub dealers $20 weekly
6 sets demonstrating records
25 cents each per week $1 50

$93 per week.

Machines sold average 150 00 Each

1 Machine sold week loss $33 week
2 Machine Sold " profit $27 "
3 Machine Sold " $87 "
4 Machine Sold " $147 "

From these profits sub dealer
receives 5% from list of 7.50
per Machine

Then 1 Machine sold Loss 40 50 week
2 " Profit 12 "
3 " profit 65 "
4 " profit 117 "

12 records sold for each
machine during year
profit on each machine
sold. $5.40 -
Minus 5% to Sub 68 Cents
Profit $4.72
adding record profit
1 Machine loss $35 78
2 " Profit $21 44
3 79 16
$135 88

Figure out 1 Truck 20 more sub dealers and 2 Salesmen in City work –

End 21 months

12=2 Coat Vary 2 Bad 10 Very Bad
12=3 " 10 Bad 2 "
12=4 " 8 fair 2 Bad
12=5 " 2 good 6 f to G 4 fair
10-6 2 Very G 6 good 2 fair to G
6=7 1 Very G 3 good 2 fair to G
6=8 1 Good 1 fair to G 3 Bad

July 28/24
Vileysmen

J B Gowdey	Orange	Orange Terr
E A Gowdey	Orange	in Pa
Porter	Viley	So Carolina
Climo	Viley	Wis
Kennedy	Orange	Ill
Fallon	Viley	Texas
Stanley	Viley	Kansas
White	—	Ky
Reid	Orange	Indiana
~~McCauley~~	~~Orang~~	Orange
Titsworth		office Orang
Hay		

E Incorp shares
Mina 13926
Chas 2,670
Theo 1670
Myself 11734
30000

Cause of records going bad
surface may not be water
but too thin Varnish
Try 20 - Reg pressure
20 1200 lbs Hydraulic
20 1500 " "
Wax Reg + give to Blimme
for a test -

ditto 20 Vis 6
20 Vis 9
20 Vis 20 by Para
print reg pressure
Blimme to test

Am afraid Selenium
interferes with Contacts
Try Hypochlorite Na
to oxidize it Try
Copper thick Selenium
film Etc Nitric
acid dissolve off
the Selenium before use
in Battery

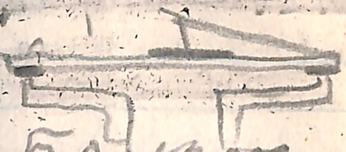
see if solution gives a
test for selenium

see if Cathode forms
Seleniuretted Hydrogen
with thick Copper black
film if so try
Ni thick a test
water

Get Cork people to mould
some Cork sheet .015 to .020
thick for diaphragms.
Hayes try pressed Cork dia
cut from sheets like
Cork gaskets we use in
Reproducers. Cut Balsa
wood diaphms -

Try some Shellac dia shellac
loaded with Naphthalene
or Nap tetra Chloride crystals)
or Dinitrobenzol & then
Stone to right thickness over

possibly wants his [illegible] on
made & [illegible]



40 to 50 years
old

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find out what
Records Dorn &
Balan are giving
prospects - place

July 25 1925 inventory of
E Ldcorp Uprights, Complete

Sheratons	3536
Wm + Mary up	1690
	5226

Think we can use all of these
for Sub-D

Consoles July 25 1925

Adam	8
Baby	1212
Chip	96
Italian	25
Wm + M	198
London	474
	2013

on
Total Uprights 8695
Subtally Sheraton &
Wm + M - 5226
3469

Idea for stereoscopic moving & other
photos, Light scene illuminated in
front then arrange for extra lighting
beam at angle of say 45°
The idea being that it's
impracticable for using
a Special apparatus for
people to hold or
accomplish the same
result by 2 beams of
light in photographing,
like the Letters in the
Front beam of the [illegible], shifting
light beam
Mechanical Engineering

~~Suggested Payne leave~~
~~charged Cells stand 8~~
~~12 & 24 hours then~~
~~discharge~~
~~Also thicker asbestos~~

Aug 5/1925

Also perforated asbestos

Thick perf'd asbest
Thin Continuous Asbestos
no perforations

Have daily test of 6
Records Varnished
thick 1st Coat put under
closed Tin Cover to prevent
Evaporation & let it soak
in several hours
Put Hart at it.

Aug 9/25 ~~[illegible]~~

~~See if there is a double~~
~~Sulphate of Fe & Mg~~
~~If so ignite & reduce in Hydrogen~~
~~so for Fe in food Cell stack~~
~~so it will not shrink~~
~~HgO can be added afterwards~~

Sulfate Fe & some sulfate Cobalt
also – or Fe Mg & Co sulfate
used

See in small way
Fe reduced by H cooled
in Hydrogen & then let
in Tetrachl Carbon –
also, gasoline – alcohol
glycerine benzene sol
so not pyrophorous & no
heating – L Ott.

Magnesio Ferrous Sulphate
$Fe''Na_2(SO_4)^2\ 4H_2O$
Crystalizes from solution
of Component Salts
in large seagreen
Crystals.

good made

Sodio Ferrous Sulphate
Evaporated at 55° Cent
is permanent in the air
Crystals stable at 100°C
but if redissolved &
Crystallized and comp
salts crystalize
seperately

Zanders to cure

30 min 35 40 &

60 minutes to combine
all the sulphur
possibly to use higher
temp if these long
periods in the press
is necessary as higher
temp will reduce time

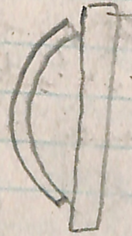
Aug 10/25

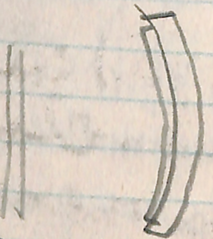
Make some Jap tissue paper dia with minimum of Shellac & also Condensers

So it will stretch some what unlike glass

Try Ni Foot Starter .0018. thick on our Disc Reproducer with stiff center. ditto plated Chromium Diaphms

If Ni Electrolytic strains & Cathode springs make Cathode





it may act just opposite

Then it will spring flat & make good diaphragms

works fine .0018

If it could be got flat by a bent cathode, could make Cobalt sheet flat which is still more elastic & also ~~the~~ Iron or rather steel by having Carbon Compound in the bath - if do this .001 or .0008 may be OK

The extra spring used to give elasticity should have a loose hair on top of it to stop building up periodic waves like prongs in Music box

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Hays pad front of phono & close lid when recording by funnel

Armstrong Cork Co
50 Church St NY City
pressed cork sheets
1/32 is used in Reproducer

Weights of Servicing Boxes

~~Case~~	~~4 lb 7 oz~~
~~6 Records~~	~~6 lbs~~
~~Reproducer~~	~~1 3/4 lbs~~
~~Oil can, grease, tools~~	~~1/2 lb~~
~~Catalog 300 best (10)~~	~~3 lb 10 oz~~
~~Motor instructions + [illegible] E invoices P.~~	
~~10 of Each~~	~~1/2 lb~~
~~10 tubes grafite~~	~~1 lb~~
~~1/2 doz Supplements 1 oz~~	
	~~19 1/4 lbs~~

Now 11 lb 10 oz
Suit Case 1 50
Comel

Aug 14/25

In Ford starter best to use Black $Ni(OH)_3$ Made by precipitg Ni sulfate with NaOH + Hypochlorite Soda + work in Regular way it adds 18% of Oxygen. There we get rid of this Expansion in forming Cell + prevent disturbing Mechanical Contacts The only swell will be due to the Endothermic absorbtion of Oxygen by force of the E Current & this is small — Hypochlorite acts on green $Ni(OH)_2$ blackens it but can be made to absorb more than 3% of Ox cant understand this. The forming runs will be less + large current + time will be saved

NG no improvement

V. Lezp men to come
to Orange to be taught

J B Gowdey
E E Gowdey
Kennedy
Reid
Chisholm
Daye.

He keeps Porter
Tilsworth
Fallon
Climo
Stanley.

~~Old tune "Garry Owen"~~

Toldwatch

Aug 15/25

Personnel NY Recording Lab.

W Miller	$192.30
Cronkite	95.00
F Rothman Mechanic (Contracted)	65.00
H W Emmons foreman "	95.00
J Loesche (Recording) "	65.00
Gettcliffe Librarian, Phone messenger	35.00
Rabenistein Cashier, typist, Regally	55
Voorhis, Contracted carriers to factory, Recording work	65
Weber "	65
Week	$732.00

Rent 5500 year
or 458.33 month
Lease runs till Jany 31 1927

~~Get original copy of Dorns instalment payments & also copy of Contract used by Bolan~~

100 CC Column stuff from Colloid Mill which was clear Shook it up again

July 11th. 10 am
12 1/4 inch clear at top
16 1" " "
21 1 3/4 " "
27 2½ " "
28 2 3/4 "
Aug 7 3½ "
20 Clear

But in all Cases 95% clear in 2 days or less.

Centrifugal throw on Earth at Equator 1/300th of its weight 1 gram on surface 3 1/3 milgms

On a Wheel 10 ft radius going same vel as surface of Earth 6600 times its weight whereas 1lb = 2 Million

We have been getting 190 2 Coat blanks per gal of Varnish Lately I ordered more Varnish used Now 21 aug /25 getting only 179

On Experiments with Automatic + 2 Nozzles .035 we get one coat 14.3 grams on one side appears thick & is/OK apparently printed 10. ½ ok ½ pp at Edge - all Rough Expmts

.2 nozzles 35/1000 each
gives 14.3 grams varnish
makes good record varnish
blank, one coat can put upside ok
dries ok – or 28.6 one coat both sides
old 2 Coat 190 blanks per
gal – Last few days put more
on by brush & get 179
Varnish blanks per gal
2 Coats, we could make a
1 Coat blank from this

old 190 – 18.94 grams 2 Coat (9.46 one side)
new 179 – 20.11 – 2 Coat
auto 125 – 28.60 1 Coat
& this be equal to 3 Coats
old way.

Workup plan to
Reinstate if man has
paid 2 or 3 instalments

Take up having bank
send out collection notices
paying 1% $164, $1 64
Total – $3 28
or perhaps 2%
or 1½% – Cost to
bank 25 cents postage, + 5 c
envelopes – 30 cents year
Labor & profit – Where
dealer has no capital
this probably lead to
bank credits – We can
give 41 or 42% off list

Gifts made CE July 10 1924
TE " 24 "
MES " 24 "

Possibly Bonus plan may work
for salesman Salary 25 @ 30
week – 1st machine nothing – 2nd
mac $1 – 3rd mach $2 & 1
4th 3 2 & 1 5th mach 4-3-2-1
10 dollars 1-2-3-4 – accumulative

Where Barber has 2 places
seperate rooms Beauty
parlor, possibly put
2 Machines in -

Aug 25 1925.

Dealers having sub-d—
640 Dealers put on
with 2576 Sub-d — average 4 per Dealer
505 Dealers are now
operating having 1944
Sub-d — average 3.85 per dealer

135 have withdrawn
with 632 sub-d They
never should have been
put on + fault of our
men -
Thus 21% Cut off -
average 4.6 per dealer

~~Some scheme if practicable~~
~~whereby Dealers can exchange~~
~~old Dance tunes for owners~~
~~old dance tunes for 25 cents~~
~~if not worn, these tunes he~~
~~being stuck on + after~~
~~Exchange he is in same~~
~~position but with 25 cent~~
~~profit, he stands to lose~~
~~a new sale at 1^{00}~~
~~but not more than 33%~~
~~if so 66% gain at 25c~~
~~16^{50} but if loses 33~~
~~gain 1320 - Rather~~
~~doubtful profit In figure~~
~~it out - Probably~~
~~Make owners larger~~
~~buyers of latest~~
~~Dance records~~

Sept 1/25

Take up with Gohala S lake
Alteration in legs etc
Renaissance Chip & Wm & M
Console etc Get average
freight from Chicago & return
packing case, Cabinet etc
Shipping back to dealer
This is one way to save
dealer loss on these
models

Schedule of Mfg at
N London No 1 2 & 4

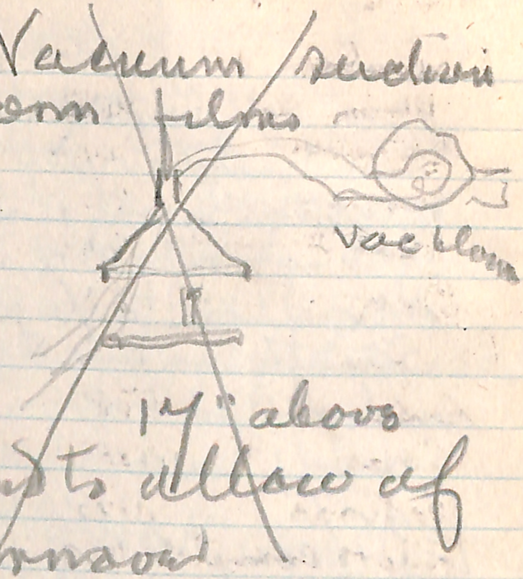
No 1 50 a week
2 100 "
3 50
4 10

Consider 450 attachment & shift
also Selfwinder if it fails
Can hand wind — this would
help single spring Mach play
450 — also a governor
to slow to ½ Speed for
thirty minute Record
both sides —

2=35/1000 Nozle present
Speeds 6th Sept
gives 15.6 grms Varnish
40/1000 18.6 grms

With air can turn
over OK easy
Speed of table little
too high throws
slightly wild

use Vacuum / suction
to form films



17" above

Record to allow of
increase

Material Cost Ford starter Battery

Battery box				
Wood		c	.080	
Handles			002	
Screws			004	
Heat Insulatn			080	
Support Cover			.225	.391
Cell cans		c		
Sides			.088	
Tops			.025	
Bottoms			.025	
Fillers complete			059	
Spacing sleeves			0096	
Gasket			.010	
support nut			0115	.228
Cell Elements				
$Ni(OH)_2$	2.827 lb	50c		1.413
FeO	2.570 "	50c		1.285
Separaters	1.434 lbs	25c		.358
Ni plates	1.743 "	40c		.697
Electrolyte				.365
Poles				.209
Nuts				.156
Clamp plates				.312

Cell connectors	.180
Terminal parts	.123
Hard Rubber Cell parts	.450

Total of all parts 5.763
Sept 4 1925

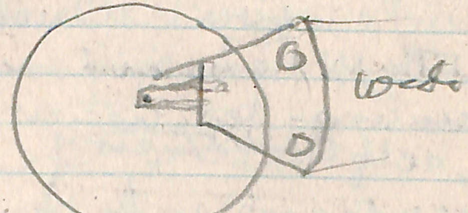
~~Dalley~~ ~~Hart to Cook TBS~~
~~+ pour out 10 min sample~~
~~20 30 + so on up to~~
~~3 hours — Lott to~~
~~distill off up to 350°~~
~~or higher — find~~
~~stable point + Disc Blk.~~

~~Werner What is the weight~~
~~of the Recorder supported by~~
~~the Saphire ball —~~

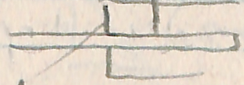
~~Also How rigid is the clamp~~
~~for the tension Spring~~

Also ball lever should be
of Harden steel & stiffened

Think this should be



+ very rigid — at edge
where clamped should be
sharp



~~Vary Chambers~~
~~See Moore get Copper~~
~~Muslar no. music +~~
~~plate 001 Nickel + Strip~~
~~for diaphms~~

~~Lott Rig up plate.~~
~~Cobalt diaphgm~~
~~Square plate 5" wide~~
~~6 inches long -thick 7/2~~

Sept 7/25

Experiment on a Condensite Varnish with Paraphenylenediamine & find the ingredient which causes Para Pd to fix it to rubbery state ½ hour or less after painting - for use as a varnish self condensing

~~Zanders make pens Employ only pure rubber to see if tests are same as with Recovered & Kepp tests~~

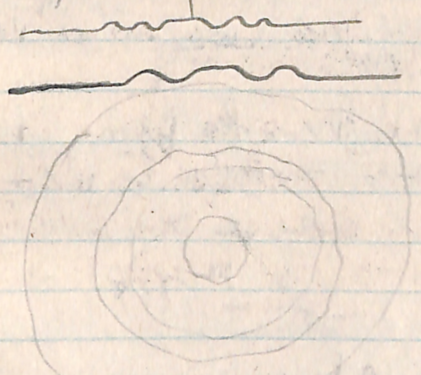
~~Viley shows me his system of Recording Rent periods~~

~~Also when Record wages are changed Record~~

To get free of nitrogen strains in Diaphragms for recording

plate them out of Electrolyte Say Nickel Co Fe etc

also can plate to shape

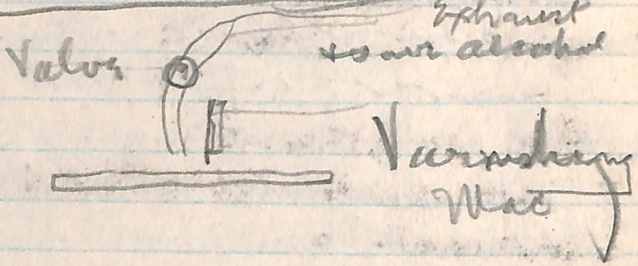


to stiffen Center, use Copper mould & Selenium wash as in disk - Stamp -

~~In Steel Card Index put on 1925 inventory when finished~~

~~Also sales Mac & records probably have to add 4@6" to length~~

Buchanan or Ted Loy Expert
14 - blanks pressed at start
Very slow down after contact
15 seconds to get the pressure
to eliminate air —



Arrange enough of Burn
dealers who are not on club
but buy fair amount of
Records to inaugurate
the 8 Sample 12" disc
when all worked up.
Make Dept Samples &
send them to say 25
with proper label -
fix label now &
get names —

~~Push the 450 disk & get~~
~~supply Recording knifes~~
~~+ Reproducer parts &~~
~~Reproducers~~
~~also attachments~~
~~Rush for set 1st~~

~~Get 100 attachments~~
~~for speed & to change lever~~
~~on machine —~~

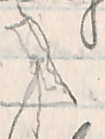
~~Have all the boys go out~~
~~3 days each with Gowdy~~
~~putting in Barber shops~~

~~Get from Burns the~~
~~information I want from~~
~~Dorn~~

~~Make up Reports & forms~~
~~want from Dom &~~
~~Peters~~
~~Balan~~

~~See Richards about warp~~

~~Put up all the beds >~~
~~also less strain on spring~~
~~change spring so it~~
~~takes strain off when~~
~~up by going to Center~~
~~+ ~~also~~ angle higher~~



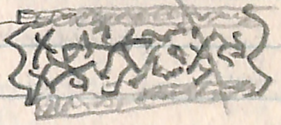
~~Hand get a pkg for~~
~~12" Record right away~~

~~See Schmucke on~~
~~Rubber tests latest~~

~~See Burns about~~
~~Albany jobbers~~
~~dealers~~

~~Fix up final Metal~~
~~molds of Medoff -~~

~~Speak to Payne about~~
~~lessening bad pressure~~
~~now holes would be in~~
~~little Very Coarse fibre~~
~~with thin sheets on each side~~
~~beat fine -~~



~~For Duplicating Dalley Make blanks~~
~~without fibre all chalk,~~
~~$MgCO_2$ or other fine material~~
~~+ 3 Coats. Plaster Paris -~~

~~Dope a female Hi faced~~
~~+ see how surface sounds~~
~~also try with 1/3rd less~~
~~weight + also V light wax~~
~~Reproducer~~

Werner = Show me steel used
on new Recorder
Must have it glass hard + finest grade
Try alloy steels - or Thompsons Quartz

~~Fred Ott make some gap tissue~~
~~with thick dip so 1 or 2~~
~~papers after pressing + condensing~~
~~be 002 0025 003 0035~~
~~004 005~~

We should Expmt on Condensate
Resin using Catalyzers
Either KOH or HCl as the
Resins are different, We dont
use anything now also
Expmt with reflux tube vs
pressure to make Resin
The Swede or our present
man

Next job for researcher
on Ni_2O_3 hydrox
when he finishes

New scheme for Colloid
Lithia ore filtering

Put on a suction filter -
over it put Kerosene, The
water is reduced from 85%
to 28%. loss with heat is
only ½% - Kerosene used again
This seems good
Article by Homalka
Chem Ztg 49. 391-2 1925

Try it with $Ni(OH)_2$ on water
filter, or Vac pump - Try Clay
Bentonite etc -

~~Get Blum's rating~~
~~from Dalley's 2nd lot~~
~~B.S. Test records~~

Sept 7/25 —

~~Payne - Use coarse asbestos~~
~~but instead of beating fine~~
~~& breaking into short lengths~~
~~& seperating fibres~~
~~Use a fine Chopper like~~
~~a Hay Cutter to get short~~
~~lengths if necessary~~
~~but not to split up into~~
~~seperate fibres.~~
~~This coarse asbestos~~
~~paper producing an~~
~~open porous structure~~
~~like big & small ropes~~
~~in screens - Could~~
~~be made into coarse~~
~~paper & then run~~
~~through chopping~~
~~Machine or Carded~~
~~like Cotton -~~

~~002 made by Kasakova~~
~~also~~
~~Try 1.8/1000 Electrolytic~~
~~Nickel Fe or Co diaphragm~~
~~in Reproducer of Ours~~

To get Nickel diaphragm
straight Use Curved
Cathode so natural
tendency to Curl is
Compensated for -

Take up Dup on Cylinder
See if Cant use Repwax
& lighter Reproducer
so Ball dont smear
also larger radius ball
to get more surface

+ diminish pressure:
also very lightly graphite surface so just darken a shade & get rid of all extra graphite —

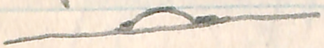
~~Hart get two rejected female (Metallic) clean & dope, then make a wear test, 1/2 inch circle near middle so I can detect defect, note when it should be cleaned.~~
~~Try one first — its ok goes to [illegible] to [illegible]~~
~~On the other want to use heavier Reproducer~~

~~Payne left bottle Electrolyte from cell 5000 [illegible] run was probably 5% Carbonate. Try it with Ba OH (Schmucker) to make it all Caustic~~

~~Hart to run wear test on a Metallic female~~

Try expmt of intercepting the air that blows off chips in recording to find if it makes surface

In addition to plating .001 diaphragms plate a center



.001 thick slight arch to get right stiffness

~~Ask Traveller to ask Combn dealers do they have mailing list of their Talkers Etc if so we can give them a good tip~~

Try Repaint records by
using 4 Coat Var on them
+ Repaint technique
When we get making 4
Coat prints

~~See Buchanan get him
not to increase pay roll
in Pkg Dept 26 until all
are hustling to keep up
with increased orders —~~

~~Make Repdev Reg
with 001 002
003 004 nickel
Diaphms +
stiffened Centers~~

1 5/8 diameter is size wanted
for nickel diaphms
Benny mkg a Cutter

Andersons Assistant ?
saw in office Maron

Get good man who could
act as understudy of
Anderson get sick 4 ;
This will be Whiting

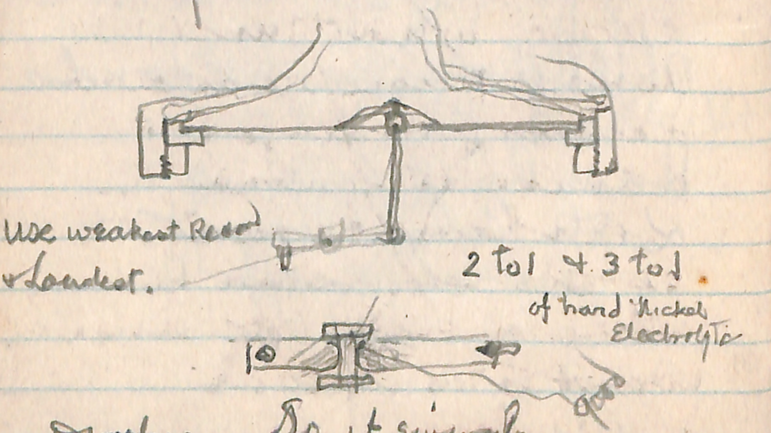
~~Inquire if Committee
still passes records~~

~~Have Hart continue
2 oth Cobalt Expmt.~~

Walsh
Cant we rent a Lauter
player piano — 1000
Aeolian Co offers
Music rolls 88 key
15 Cents Classic
semi classic etc

Werner make 2 new Repdcr
like the old ok light Repdcr for
wax repdcrs to have 3 models

Make a Regular lever Repdcr
2 Copies



So it swivels

Diaphm
+ up to date 001½ or 002 or Condensite paper

Get a Radio man = Experiment on
Hitching Radio set of owner with our
phono to amplify our records for
dancing — Ashenman man

Hart try a reproducer Light that
is used on wax record on a
Nickel female — also instead
of Regular Repdcr use a 2
oz weight + Lighter diaphm
so stop chatter marks —

Walsh what must be
~~done to Music so an owner
daughter who sings from
notes can sing done last
work + have it sound ok
so she can learn to
interpret from best singers~~
Want to tie up with
publishers.

~~Walsh-Kerrn what is limit of weight of supplements mailed at present prices~~

May consider enlarging

Find out cost of Bonding salesmen for dealers from biggest Co in NY We recommending to all dealers they bond their salesmen—

To get 50% more on a record use instead of a disc & moving fricti[on] Use Reg Machine & govern & by a Cam worked by horn to regulate speed all the way cross giving same circumferential surface speed

This with 450 thread gives a 1/2 speed of machine 135 min for 12" record for phono book publishing

Springs to be wound continuously by Electric Motor

All this can be put on Reg Machine by attachments

Can use this idea on Varnishing Machine—

New London daily output in this wk

Sept 25

#1 85—
2 50
3 25—
4 10

L Upt 60

5 days week

170 daily — 850 week
3400 month

Sept 24/25

Williams says present rate mfg 12x4
Consoles is #1 85 per week
2 50 "
3 25 "
4 10 "

Estimates following inventory of no

Sales.	No 1-	No 2	#3	#4	Total 205-
Sept 1st	320	1190	450	90	2050
Oct 1	460	1690	650	130	2930
Nov 1	710	2190	900	180	3980
Dec 1	1092	2415	1012	225	4744
Jany 1	1475	2640	1125	270	5510
Feby 1	1815	2840	1225	310	6190
March 1	2155	3040	1325	350	6870
April 1	2495	3240	1425	390	7550
May 1	2835	3440	1525	430	8230
June 1	3260	3690	1650	480	9080

Total 20"

New varnishing
old output 190
two coat on a side per
gallon Varnish

New 2 Coat 133
per gallon

Labor 2 taught
girls 5 days teaching
average 152
blanks hour one
Coat - old way
209-

Trained girls 2 girls
make 1200 2 coat
thicker V per day

Girls being trained
about 700 day

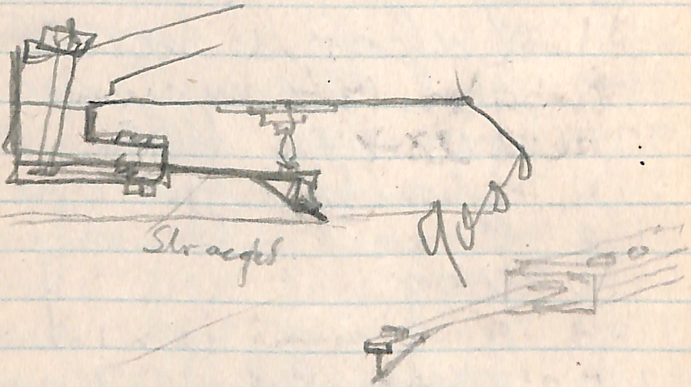
Oct 1 /25

12 Vis 2 40/1000 holes

speed across 16 ~~[illegible]~~

seconds – 16·93 grms

Varnish –



It will pay us to have in
Each large College a Chip
upright or No 4 Console
for use of Prof of Music
for advertising Whiting
letter shows this – S

Try Button Sound light wt
Reproducer we use on wax
try on Regular record
Fox T & Moonlight Sonata

7 Note, if average sales of
Victor is $85, and Edison
$160, if sells $2000
~~Edison~~ on 12½ he must
sell 23½ Vic
with more risks
Collection & servicing
23½ against 12½ more
reliable Edisons

8 - If selling by demonstration
the funds as he will,
2 sales of E to 1 of
Vic his investment
will be less by keeping
less Victors he [illegible]
turnover

9 - Keep stock Vic Below
100 - Except demonstrator

10 - The pull to keep Σ
is stronger repossession
less repairing best proved
by 95% of all Combin Edison
Dealers select Σ for their
own home

11 One of the worst fallacy
is that people demand
Victrola when they never
heard Σ. They want a
phono Etc thousand
have said to Edison
"We have one of
your Victrolas

12 Another fallacy is
that the Victor have all
the great artist only 2%
of people want them as is
proved by recent Cut in
Victor Red Seal & the
predominating amount
of money tied up in these
"great artist" record
that never did sell &
Cant be sold now after
a certain public hear
them they never will
buy a 2nd dose
"This great Artist" slogan
was never more than
an advertising ~~Bunk~~
fake to build themselves
up & now most of the
dealer are paying for
this by huge inventories

~~13. Victor has always boasted of their Enormous Catalog Why do they discredit it – as they now state they are all imperfect that new Electric Recording is the thing hence they start off with no Catalog~~

~~[illegible] E~~ ~~[illegible]~~
~~for~~

See if can Guard the bearings of Repdo arm to used 2 diamond + shift by device on wright from Reg to 45 min disc

Oct 8/24–

Present Cost of blank. materials
.02614
new blank BS no alcohol
.02038

Labor present 00428
BS no alcohol 00207

Repairs Now .002 approx
per blank –
Repairs BS. 00067

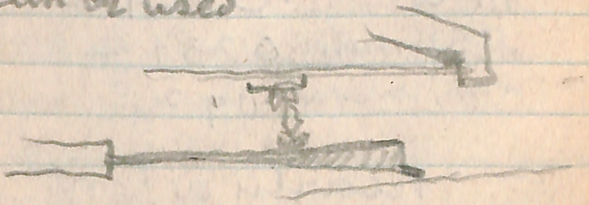
Grand Total
Now – .03242
BS process 02312
09 3 0

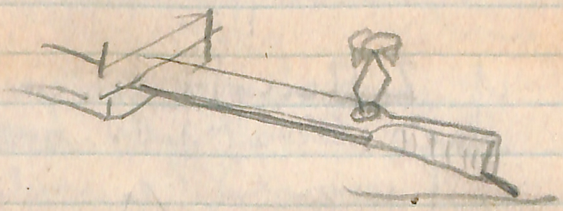
Nearly a Cent

If 2 singles face 70xT used cost for ~~[illegible]~~ 1 would be only 1.38 each cents as against 3.2 at present

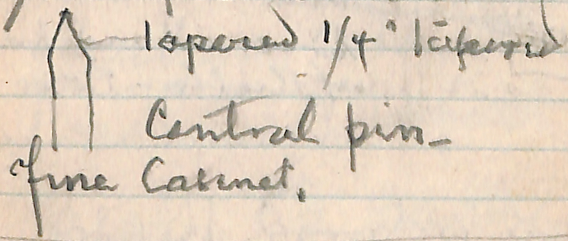
We should change
name of Records
from 10" 12" to
4 min 7 minute 45
minute & not be under
a handicap -

It is probable that on our
new spring & condensite records
of Oct 1925 we can get
leverage and increase
leverage so smaller horns
can be used





Super
Single or double face - Motor driven
no sound drives a spring
Heavier Governor
Magazine holding 2 records
or 4 single or 4 double
face use double face if turn
over is not too complex.
or 2 types at different prices
Commutator cleaning
brush - Record track 1/16 or
1/32 before music starts



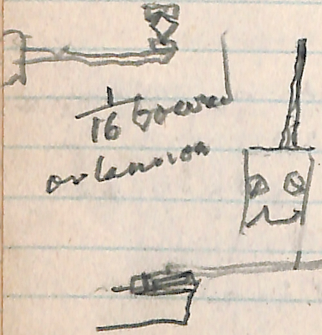
fine Cabinet.

New Reed. Use if possible quartz
Reed, if not use steel
Use metallic Magnesium for stiff Cups
and Lignum Vitae or Maple for
Connector

possibly double width to spring & only
1/32 connector gives same pressure

Send my WE Microfone over
& get it fixed up
It fries awful when I make
it sensitive enough —

No 20 used with of Violin test
003—6—10 stepped up



Spring lake
then
1.58 Dea

Dea on wideband
of Radio — Dope

Every Exchanged Ripple
Costs us 98 cent but
I have stopped Replating
& that will reduce cost

These Costs are too high
Replating drums too high —
see Johnson

Cost of 100 10" double
face records
20 cents Labor & Material
of 200 single face 29 Cents
for the pair
or 9 cents extra =

Vitreys old records
Blum to pick at
random oldest
if possible ~~or for~~
pick 50 each
week & grade
them —

Lighten down of Reg Reproducer
altogether too heavy & Ends
strongs at card

Give Werner a Microscope

To repolish old diamond & fix up a Rebuilt reproducer Cost .98 cents Johnson say they only chg on diamond work 10 cents on cost This makes it 88/ cents - they replate etc which will now be dropped these should save 15 cents this should reduce to 63 cents

10" 2.687 longest
12 3.687 + Spaces

Multiply 3 to 1

3 - 861 -
4 = 1148
5 - 1435

---

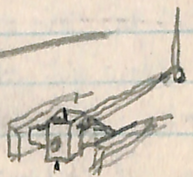
135 - Mixers - do 3200 blanks a day 12 hour on first start Dally says 3600 can be done easy. now 4100 in 12 hours

2 If 3 more is ordered we can make 16000 in one shift + one crew which would be cheaper than 2 shifts - also gives us chance to put in 2 shifts + gives all we will ever need

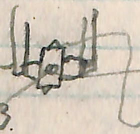
4 if worked 2 shifts
gives ~~280000~~
2 shifts 42000 blanks
order 3 more

Theodore = Condensite Varnish
filled with Diamond dust
& Condensed for grinding & polishing

BS 12 to 18 hours
Cooked so just dent
with finger nail — & and
a solvent Use test
of Emerals Metalline for
Dipping

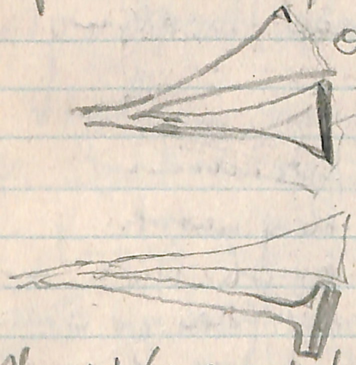


Oct 27/25



150 thread diameter
450 thread —
Swivel on B
to reverse goes hard to a
stop

Oct 27/25
Try a duplex horn. The mouth
of one is closed & this acts as a
sounding board. The other is
open — The closed one
acts as a sounding board to
return the wave so it coincides
with a new wave & this
reinforces the regular wave



with 72 turns form around 1 large funnel

Should be exact length

Weight on disc reproducer should
be made entirely of ~~hard~~ soft
Lead to prevent fulcrum from
moving by brass elasticity
with loss of amplitude &
Sound Energy

Make a record Red Moon in Condensite
phone 25ft back-
Track very light- then deeper, then
deeper until deep as can to
bridge walls, always start at
beginning. This is to find
out how much volume
lost by deep tracking

Another Experiment
Track for Reg work
phone 25 ft back- then in
next room as far as can
door Open. Use this
in black to test reproduction
for Volume-

Dance Recorder use 010 to 020
wire, on account of length
& different positions of wires
must make metallic wire
in 2 or 3 links. Nov 4/25
good patent

Nov 6/25
Notes test at studio
4 Violins reco way
OK but think I could
be dropped a one
~~Do~~. When Cornet
plays with them
in melody ok
but when Trombone
joins in playing
Harmony its Very
Bad interference
this is of course long
with Suwanee River

If Cornet joins in on
the Harmony its fair
but not so sweet as
Violins alone but
passable —

Took only Violin
put one much higher
but in right place
too work must have
the Octave higher of 4th V
taken by Flute or
piccolo —

Trombones arranged
like 4 Violins
Quadruple sloping
are perfect
Violin nearly so

Violins + Clarinets
together Quadruple
slopping NG

Clarinets 3 Reg
triple slopping &
1 very high is only
fair but if the one
not used well
now take 4th one
& put it in same
position but
octave higher
its NG high 3 lines
to sloping & drowns
out lower

Trombone & Cornet
in 3rds fine —

Tried Cornet & Trombo
& 2 Clarionettes
1 2 3 4 — Quadruple
sloping plan
Works OK —

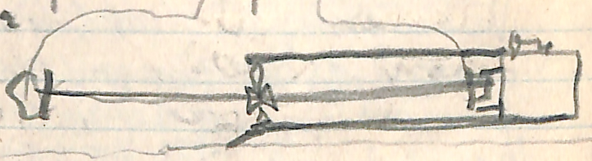
I note in playing Moonlight Sonata, with its very long drawn notes that it blasts not on first part of note but after a ~~stem~~ time say 1 seconds. Putting more weight & floating weight stops it. Evidently something in tone of repeated Replicas starts the floating weight vibrating. This could be stopped by putting a loose weight sealed package with Men Dope rubber which would dampen so periodic waves wouldn't build up the amplitude. perhaps a cup with Lead shot would do

New Loud Rec like Sonya for test wear

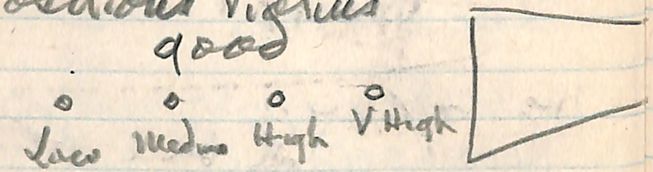
Claphands — Here comes Charles

Dec 8/24

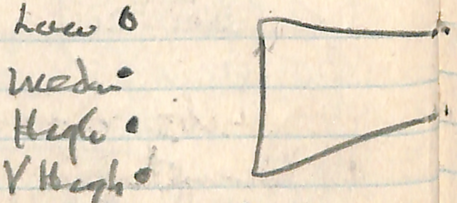
It looks as if spring & Knife Edge must be on both sides of Diaphm to get a true wave



A positions Violin - good


Low
Medm
High
V High

Poor way is. B


Low
Medm
High
V High

or in any way not so good as A - which gives more even volume

---

~~Chaplin~~
~~Draftsmn~~ ~~Simpson~~

~~Bonus~~ ~~Christmas~~

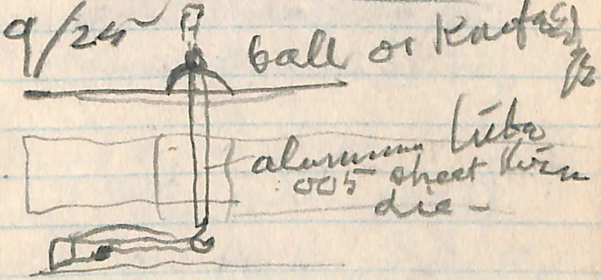
~~Van Mac~~	~~350~~	~~175~~
~~Blanke~~	~~500~~	~~250~~
~~Fe Pocket~~	~~100~~	~~350~~
~~Andy~~	~~200~~	~~150~~
	~~$1150~~	~~925~~

~~925~~

~~$2075 -~~

paid

Dec 9/24


ball or Knife Edge
aluminum tube
.005 sheet turn
dia -

Tube moves thru up button on Diaphragm as weight drops in U

Since it seems impossible to
sell an Edison to a Victor
owner Our best bet is to
sell attachments &
improvements & fix up
their Victor to get Record
made of needle Machines

Make test - Changing
them as equivalent to
a plant of an Edison
charging so much
for attachments

possibly No 1 Loud
& 2nd blast because

the particular
Sample I had was
too thick or thin

A worn record where
shine only is worn off
has enormously increased
friction (no dope [illegible] Stearin).
One Spring machine will
not on full winding play
fully one record
with Stearin plays 2
Records Each with
4½ oz heavy reproducer

Dec 15/25

Reg weight alone 7 oz
" " hung 3.75 oz

No 2 Lead sides alone 8 1/4 oz
Hung 4½.
Counter Spring on 3½ oz

Big brass weight alone
13 oz

"For 40 min 12"

Music all kinds longer
no royalty — [illegible]
from artists or Copyright
Songs already in
Cat / New Music from
inexpensive players
Jazzy + Bed time stories
stunts,

Schall & Richards
to Experiment
on making + Varnishing
Each piece of a Cabinet
varnished separately
& then assembled
so no rubbing
afterwards

In loud spkr put in a 007
sheet Aluminum not buckled
this is as loud any Regular
Conduits diaphm and seems
Clearer & sharper details,
But under continuous Stress
of counter spring it may dish
will try plate some flat
nickel on disc mandrel
004-

Write Ireton & tell
about Marsh + Gabler
not doing anything
Compared to Lewis
Servicing etc

Write

~~American Magnesium Corporation~~
~~Elektron Metals Corporation~~
~~Send for Catalog~~
~~We are interested in~~
~~sheet metal .004 to~~
~~any thick & flat -~~
~~get samples -~~

~~Paullin & Kansas City~~
~~should send out a~~
~~circular that they~~
~~now will keep a~~
~~full stock of Standard~~
~~Records, in the 300 &~~
~~690 list & can deliver~~
~~by parcel post~~
~~within 24 to 48~~
~~hours~~

~~& will always keep~~
~~a stock etc~~

~~Make another Cup~~
~~for Dia 1/2 larger~~
~~Dia - & solder 1~~
~~to Reg arm increasing~~
~~hole more~~
~~than now in place.~~

Also a smaller
Dia. Cup & thinner
dia -

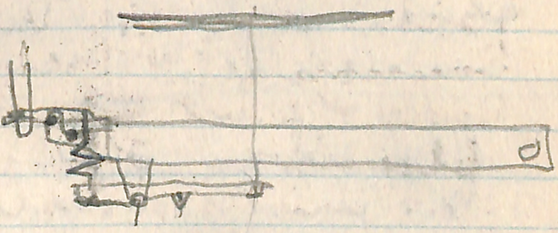
Dec 24/25—

Try Expmt of printing Varnished blanks with fine smooth surface then putting these in press between Reg moulds & print again

Also do same thing with paper soaked in Varnish & baked & use 1/16 thick Crucible steel between Each & print to get blanks— Then use discard Ni moulds & print with music

Can print 5 or 6 at once—

~~Whitney — When you send Real Small dealer sample record on mail & when you have every record mfd so 1st dealer who sends in an order you can ship the same day this is Egg of Columbus for success here—~~



This acts opposite of present lever which when diamond goes down the Valley ~~[illegible]~~ dia goes up

With this it goes down

Retractile spring must lift the inertia weight completely

Simpson lay out & make

Dec 26/25

What we need in Ford starting battery is a very porous Nickel hydroxide to permit gases to get out & Electrolyte to get in — but it should not have pores as fine as Silica Gel. Start Experimenting dont boil but make thick precipitated pulp & Vacuum dry cold to stop crystalizing. then percolate the Na_2SO_4 out

Also precip something with Ni which is insol like $Ni(OH)_2$ in NaOH, that can be dissolved out in some special solvent

~~Why not change the Rack feed screw or rack so that the diamond point pen always~~ ~~always~~ ~~in the middle. Simpson layout~~

Proposed prices 450 thread

12"	both sides	10 Tunes	$3.00
"	Single	5 "	1.65
10"	Record both sides	5 tunes	150
"	one side	2½ tunes	1.25
	Dance Record 80 single		1 85 cents 1 50

Get exact time of playing

Try Case record & Sonya on 1 spring short

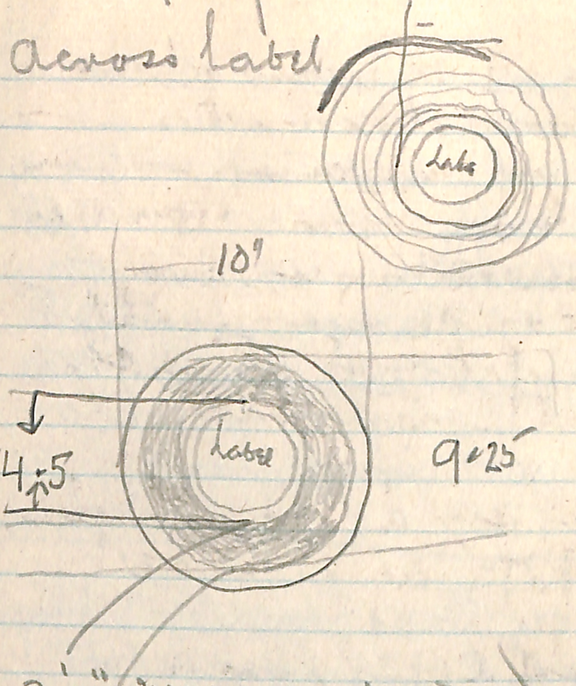
Have Say Logdon up see if shoulder column will give better tracking

---

28.350 grams

1 oz

Reg Record



2½" music is standard

Outer Edge of music
Circumference 9.25 inches
inner Edge of music circumfer
4.5 inch a wave at inner
End approx ½ as long as
outer end.

With 4 oz brass alone
+ large diameter —
Spring made of — wire
with — turns, on Reg
horn setting + 'lever' ~~[illegible]~~
not quite horizontal
4 weight 4 oz it was
not loud enough

put on lead weights
4.75 oz it was
Reg loudness + nearly
scraped off Soldiers
Chorus, + OK on
Sonya —

I now reduce weight
to 4 250 oz —

Lead wts now weigh
both 18.500 grm

about 1/2 of this weight
goes on back support
leaving about
9 grms on diamond
Extra – e

I note that pressure
measuring apparatus is
Rotten – a joke

Noticed that lever with
steel link connection
had to be shoved down
when spring was
removed (fixed it)
by twisting needle in
lever bearing ⑮
rotating it, then weight
of lever dropped
this is important point

With removal of spring
weight was not
lightened by bum
measuring instrument
$4\frac{1}{4}$ oz so all we should
use on diamond
Can find out by
wear test probably
$4\frac{1}{2}$ oz will be OK
+ not blast –

In reg horn set
New Reproducer has a
margin of 4 paper
10/000s each on
Soldiers Chorus which
Callipers 204-217
230 213 –

Margin of 40 difference
50 caused tail of lever
to strike record —
We can cut corner off
tail + shorten link
1/32 + get possibly
60 difference — 190 lowest
255 highest
but probably 40
difference will do
all except now &
then rarely

With Ear in line with
funnel hear on old
best Repdr 78 inch
Loudest parts of
End of Song —
With Sunday best
No 2 hear 63 inches
that square is 39
against 60 for old

Repdr — this is on Reg
setting of Reg phon
no position seems
louder — Weight
about 4.75 —
Bad uncertain
measuring —

Put in another made
up lever see if in lever.
006 diaphm

Changed for another
lever — didnt make it
as good as No 1 old
Tried another lever
10 degrees angle lever
never tried before

put in new diamond
no change in Value
but it stands
5 Cardboard under
Soldiers Chairs
of .050 - & never don't
show or tail louder
Record - this is
ample Margin
if we use this
lever

Using horn at
right angles to horn
& back to partition
Old No1 can follow
the lines New can't

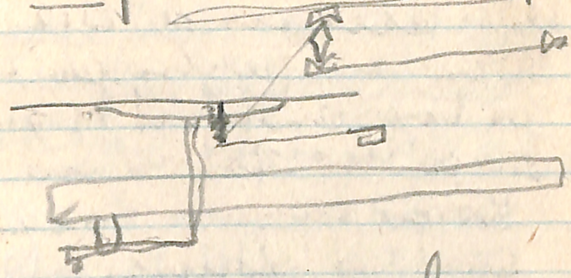
follow only loud
parts weakly –

006 diaphs in No 2
Repder is not as
loud as a tight 010
We now try a 016
made specially by
Luhr – no better but by
stiffening retractor spring its good on No 2 yet

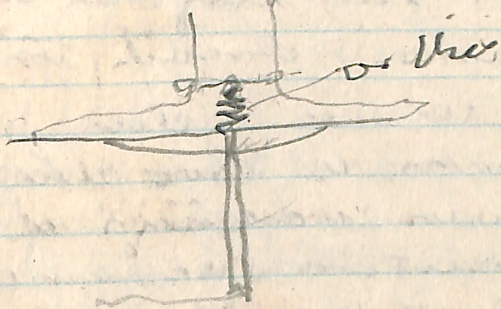
get general sample of
our Hard Rubber
powder we buy
& test for Sulphurated
Asphalts, Schmerks –

WE put in a 012
Dia as perhaps 016
is too stiff if it stiffens
as to the Cube as
Theo says— Keep
spring same
016 with everything the
same is slightly better
than 012 = There is
want of long elasticity
in up movement of
diaphm = nothing but
stored up elasticity
& when it returns upward
there is not enough
Elastic power to pull
diamond down in
Valley— Needs a
Counter spring to
give more elasticity
with long elasticity
the Diaph is too short

in a very narrow range



this shows principle



or this

& others

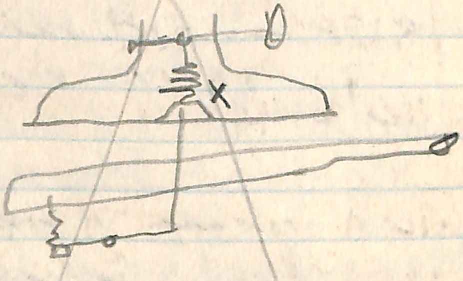
Hurley to make a 1/5
pat af 72 triple
completely to get
Ma out —

2000

Latt use of our
sulfate on Red ore is
made into permanganate
so changes Color by
Hypo

Sunday 10/1-26

Simpson Layout a
another Retractile spring
on tension system
The one we have put
tension on diaphragm down
I want another to pull
it up-



Cut open in place to get
at spring X or Cut tube
in 2 + put flanges on
2

We put the back spring
in tube by splitting it
Spring wire 10/1000
Round - Dia of spiral
wound on 95/1000
Arbor - Has about
1 oz pull back -

Oiled link - 831/1000
from support to support

List price Nickel plated
Reg Reproducer -
18.50 - 50% off to jobber
40% off to dealer

Gold the most expensive
is $22.50 - Same discount,

New Long playing Reprdr
should be together with
attachment $20 list

Compound lever in No 3
is better than old reg lever
reversed & put in No 4
I have another straight
not 10% angle Compound
lever will substitute

Weight of old reversed
lever — 700 milg

Weight of new Compound
lever — 530 milg

Weight of ~~800~~ 8/1000 steel tube
link 220 milg

Weight of diamond.
retractor spring - 50 milg

Weight of old chain
3 links 130

Needle bearing 027

Weight back diaphm
spring 40 milgms

Weight of diaphm
Reg 1.300 milgm

Latest prices = London Rapdn
ni ~ $20

50 Cent Record 6 min 8.3 per min
75 " Victor 6 " 12.5 "
$1.00, Edison Reg 10: 9 min 11 "

10" 450 Edison 25 min 1c
150 price — 6c per min

ditto ½ 1.00 8.3

12" #50 Edison 2.75. 45 min 6c min
½ or 1 face 1.75. 8 Cent min

No 4 attempt at Dup was
ng - weak & blasts on
heavy notes. bad wax
record, used Mica diaphm
007 - also aluminum
007 - neither improved
A - Used Reg Shellac
diaphm with aluminum
dome & also batten
to support bolt.
By making spiral 010
wire & 3 turns to weaken
pull back & be far less
than we had. This
Repdcr scrapes wax,
3/4 & dont blast or rattle
& nearly as loud as
#3 our best.

Lantern Slide Advtg Mach—

Material Cost $ 15 41
Labor 6 93

$ 22,34

No genl ex-
Cost Motor
or Packing.

Tools Cost $ 4.988.

Reg with fish line
Retractor spring
weight 3½ oz
dont blast on S shows
but 30% weaker than
of W Miller 2½ oz armour
put on—

Sales to Jobber

1922	54006
1923	74785
1924	40774
1925	21667

The 4 Reporters Reg with Walls Willer delgado & Aronow ~~[illegible]~~ & Fish Cord spring diamond levers inlet & color sheet ~~[illegible]~~ Steel Connectors on Weight –

Weight on Diamond

No 1	4 3/4 oz
2	4 7/8 "
3	4 3/4
4	4.5/8
Standard	5 oz

No 4 little weak

All others same Volume No Canary or Blast on solder Chorus –

Dont clean up area Case note – reflected light shows 2 & 3 spots ~~as~~ places only 2 spots –

These except #4 ok

#4 not loud enough

Springs Hammer Pieces were not tempered

Redpath Estimates cost
of 1450 record attachment
Complete with Case now practice

Material	15	cents
Labor	79	"
	94	

Cost Long Reproducer

Material	105
Labor	129
	$ 2.34 cents

This is approximately
8 cents more than Old
Regular Reproducer
These figures are only
Labor + Material

Condensite Resin dissolved
~~Alcohol~~ in 10% Na OH
Sol - precipitated with acid
dried, Dissolved Alcohol
& 4/4 + Reg Pan

Reg. 7.3% on Dehandes pe
Alkalin do 0.52%

Asclepias Subulata
a milkweed Rubber
producer being tried
in California

War Dept has at Panama
a Rubber plant Expmt
Station send for seed

Urine

Aug 7/25

albumen .09%
glucose .04%

Feby 2/26

albumen .083
glucose .480

Find out if Ford is always
sent all our Monthly Records
if not send them Reg

Write Payne when he
renews sol in cell it
should be discharged
way down & filled
quick as Iron will
probably oxydize
some, this may
account for drop
on renewal
~~##~~ then it will
require some time
before cell is built
up again —

To test [illegible] cell in
Reg way. & pour out

then Either put thermometer
in filling hole ~~with rubber~~
~~Cork~~ & see if temp rises
as there may be a lot
of Fe that is disconnected
& never discharges
this will oxydize &
heat up

Go into dif schemes
for making better
contact. I had
many schemes given
Payne —

Tone test Frazes
Ft Myers, 2 machs
both wrong 1 not
wound up enough
other cut off stopped
too soon

Hereafter all Tone test people must be taught like travellers are taught —

See Walsh about

Negro Spirituals
[illegible]

Try Export Dance Record Loading with Lead Center dia.

Also Opposite Lighter up lever weight

Also air cylinder to make more dead beat

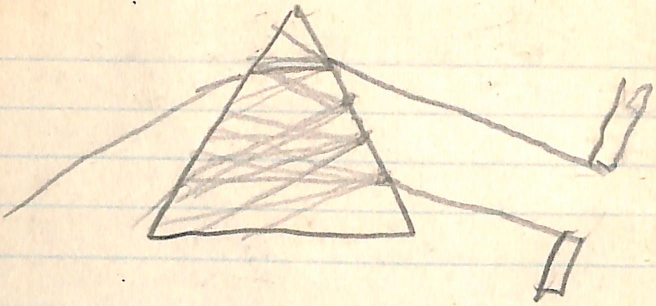
Also different air chambers —

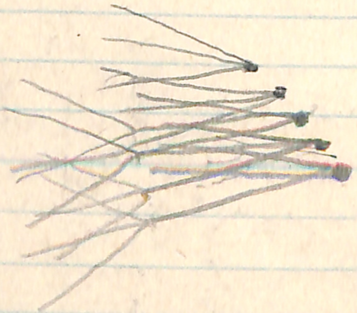
Also find if blasts more at label than outer rims. Score as these heavy strains occur at outer rim

As larger the Dia smaller the amplitude on account of larger air area. Try smaller Diaphram with the Extra holder I had made

April 29 — My Urine
Glucose .350%
Albumen .070

On Feby 2nd
Glucose .480%
Albumen .080





19500

20
30
0
60

1950
14
7800
1950
0
2730
19500
53

27300 Gross
19500 Cost
0
7824
0
0
3120
0
156000
0
2
1871
12
4
7
3
1874
4
21

1 ft 1 inch 144 inches

62)1728(~~[illegible]~~ 23
124
188

23)144(6.2 6 lbs
138
60

456
4
27.38 grm

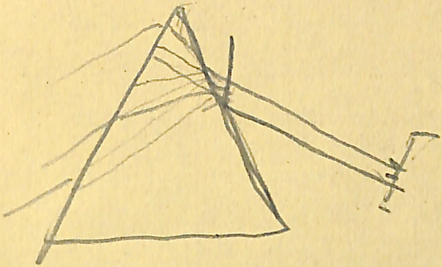
1% 27 grms per foot

5280
5200
10560 00
26400
27 48.60 0

450)27 48.60
27 6.0 0 2

(400000 50 0
30000 0

2,740 000 1 ft inch thick
27
19180,000



27)1918000(71030 0
189
28
27 00
187
213091

710000 grms

450)710000(1570
450
2600
2250
3500
3150

20 lbs -

100 lbs coal Ton ag

3 tons ag 300 lbs

3 lbs

100 - 600/2000 (3

9

Exchang 66 at 25 cents

4) 66

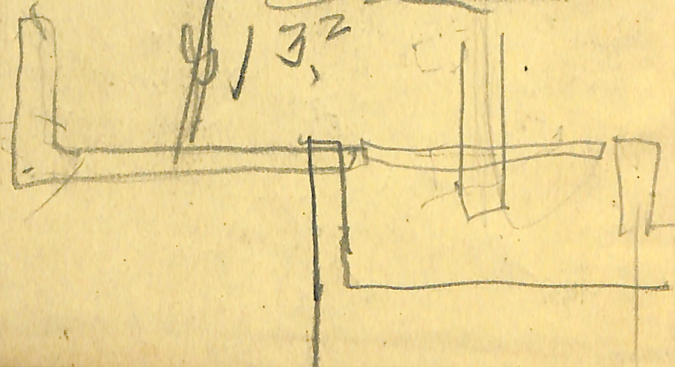
16.50 profit - Sell nuts

33 pro

Mess 33

40

$13.2



18 - Mfg

Office

3 Recovery

3 - Royalty

4 Exch

28

04.2

140

280

42

2) 114

57

35

22.0.00

117

53

4

322

32.2

1.5

33.7

40

33

2 3 4

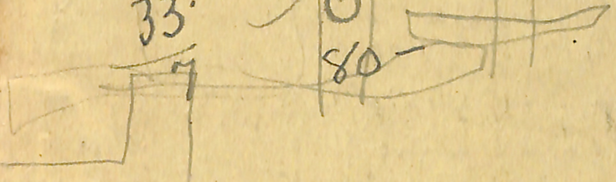
5 8 5 4

6 0 8

6

80 -

1950



Sulphides

Bi Sulfide
Cd —
Ca "
Co
Mo " Di sulfid only
Ni ' Mono & Di'
Zn "

Possibly loading
Vulcanized Asphalt

? abstracted from Vol 1

Carefully MP - Some
high M Chemicals
○ mark not Copied

Hexametaphosphate of Mg soft & tenacious

Ammonium Magnesium phosphate a glass brittle,

Tetrametaphosphate Sodium precip gummy even when diluted 100 times when precip by Alcohol ropy like Rubber ~~dries~~ dries to transparent fissured mass.

~~Phosp~~ Sycocerylic Alcohol after strong heat solidifies to transparent glass

Fused Phos Lime glass

see if hard BS stands hot
Electrolyte -

Chlorinating Naphthalamine
makes Resin

~~[illegible]~~ Chlorinating Santonin
Converts to a resin

Sassafras oil H_2SO_4
Converts to a Resin

Tungstate of Alumina
Resinous

Action Chlorine on Gelatin
filaments elastic

Dragons blood in Electrolyte

Soft Mexican
get other Asphalts residuum
We had a lot of all kinds
in #4 may be in elevator
room
to try Sulphur to stop
softening & test in KOH Electrolyte
with additional sulphur
Loading if necessary can
be done with Ca Hydrox &
Mg hydroxid put in when
melted so it will combine
with any asphaltic acid

Pasto-resin - Threads:

Phosphate of Titanium

Meerschaum: Carb Mg pressed
in hydraulic

2

Rubber Mg paper - ground Rubber in Benzol, then in Magnesia so Mg feels damp Have SO_2 in the Benzol then after pressed & dry add Benzol or H_2S - [illegible]

~~Simpson after making a Diamond right shape & it tried design diamond lever with right shape with present angle of the big wood model but with increased leverage to make up for the loss BUT ½ the length but same leverage to get rid of weight~~

~~See if can make hard rubber shavings with diamond tool used on turning Nickel [illegible] makes paper~~

~~The shavings will if they can be made long can be broken in the pulp beater to shorten~~

Can probably make a softer rubber possibly leave out filler & rubber scrap. This should make a very tough fine fibre

~~Get some Nickel fine wire oxidize it considerable see if it flakes bend it see how far without cracking scale See if it is insulator~~

Tried

Try some pure cotton in the Electrolyte with 50 distl. on hot plate for several days also Hard rubber turnings. also oxydized 180 mesh Ni wire oxydzd deep

See if fine asphalts can be turned in shavings. if so put in Electrolyte + LiOH, if saponified melt some in KOH, + then make, turnings

Dip finely shredded asbestos in an asphalt, Cameron, Etc Solution + Evap solution see if Sticks to fibre + stands KOH Lith

Take some Asbestos paper dip in the Cameron + Evaporate + try KOH at 1st hot, get something not saponable + slow Evaporating solvent see how long Asbestos will soak without going to piece

Theodore
Moore

Let us try a new experiment

Mould blanks so they
are high in the Centre

Then ~~gas~~ air will flow outwar
as pressure increases
& we will have no
poor varnish points
& also the act of pressing
will remake the blank &
stop dashing

In the case of some
~~fac~~ face records
I false plate can

Make

1 = the Cadmium - Fe Cd pepled together

2 Impalpable Ni 30% mixed with our red oxide 2 pkts use little agate Pestle

3 Impalpable Ni mixed with our Reg storage battery 10% 2 pkts ~~30%~~ 15% 2 pkts 20% 2 pkts 25% 2 pkts 30% 40% 50%

4 30% impalpable Ni mixed with low ignited Fe by NaOH precipitation of $FeSO_4$ — not reduced by H.

5 = take some of the old numbers which gave only 25 & 50 Mil amp of Enough to make a packet, mix with 25% Impalpable Ni + Rerun

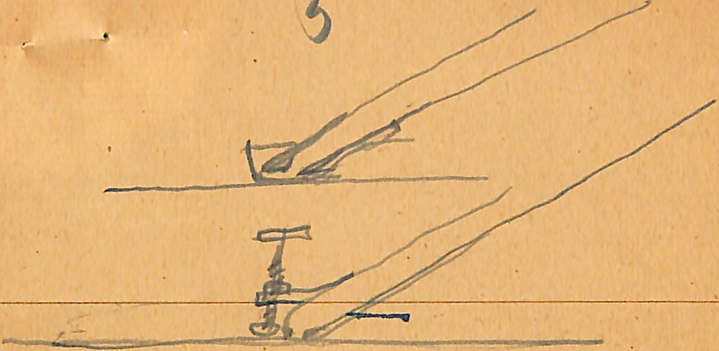
Done

Hunter to make couple of
pounds of Impalpable Ni
like last sample from
ignition of oxalate & reduced
300° F or just same as sample
sent me - get his sample
number -

Test Loseys Samples with
my WECo amplifier - up stairs

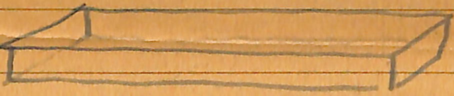
~~Tell Joe when he gets the new
Condensite diaphm with cork
on to put 3 in of same kind~~

~~Simpson give drawing for Joe
Showing back spring in Dance
R molded if pulling is
Showing [illegible] clearance
Make 2.~~



for varnish machine —

Some Nickel pans for igniting in big muffle at low temperature



1½ wide 6 inches long 1/32 thick with a rake & hoe long handle & Thermometer

L Ott look up an Electrical oven for lamps 300° F to 2000° F with Thermometers

Try some Ni O semi conductors Ox Ni hydrox fine —

Maximum

10" Reg 5 minutes on side

12 " 7 " "

Multiply by 3 for long records

10" 15 minutes on side

12" 21 " "

These are utmost limits & would be cut off on many machines as now set —

10" 4½ min on side

12" 7 " "

multiply by 3 for long 10 & 12".

fuse some ammon Chromate of
Magnesium
Ammon Phosphate MgO
Chromate Mg
Phosphate Mg

Precip $MgSO_4$ +
$NiSO_4$ 80% MgO left +
20% Ni Ox after forming
plates drying then up to
Red heat Ni Ox as binder
precip separate & mix

Or use 100 mesh +
mix with $Ni(OH)_2$ hydrox
water mix with Rubber
paste dry as a sheet
+ bring up to Red or
Yellow.